AMENDMENTS TO THE CLAIM

1   1. (currently amended) A method for time aligning first and second signals, comprising:

2   modulating said second signal by said first signal to provide a third signal; and

3   determining frequency ~~components~~ component strengths of said third signal, said

4   frequency ~~components~~ component strengths being indicative of time alignment between said

5   first signal and said second signal ~~signals~~ , wherein said step of determining frequency

6   component strengths of said third signal comprises;

7   filtering said third signal to provide a filtered signal while sweeping said

8   second signal through a time delay; and

9   detecting a level of said filtered signal, said level being indicative of time

10   alignment between said first signal and said second signal, said step of detecting a level of said

11   filtered signal comprises:

12   first detecting when said filtered signal is at a minimum level

13   during said sweeping, said minimum level occurring at a first time delay value;

14   second detecting when said filtered signal is next at said minimum

15   level during said sweeping, said next minimum level occurring at a second time delay value; and

16   setting a time delay value for said second signal at a delay value

17   between said first time delay value and said second time delay value;

18   wherein said first signal comprises a data signal encoded in a predetermined bit

19   pattern in a Non-Return-to-Zero signal format, said second signal comprises a Return-to-Zero

20   pulse signal having a frequency equal to a data interval of said first signal, and said third signal

21   comprises a data signal in which said data is encoded in a Return-to Zero signal format .

1   2. - 4. (cancel)

1   5. (currently amended) The method according to Claim [[4]] 1, wherein said step of

2 detecting a level of said filtered signal further comprises:

3   converting said filtered signal to a DC voltage signal; and

4   measuring a voltage level of said DC voltage signal.

1   6. (cancel)

1   7. (currently amended) The method according to Claim [[6]] 1, wherein said first and

2 second detecting steps comprise converting said filtered signal to a DC voltage signal, and

3 detecting the voltage level of said DC voltage signal during said sweeping.

1   8. (original) The method according to Claim 1, wherein said first signal and said

2 second signal are in correct time alignment when a fundamental frequency of said third signal

3 equals one-half the frequency of said second signal.

1   9. (currently amended) The method according to Claim [[4]] 1, wherein said step of

2 filtering further comprises filtering said third signal with a low pass filter.

1   10. (original) The method according to Claim 1, wherein said first and second signals

2 comprise optical signals.

3   11.-20. (cancel)

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1   21. (new)   An apparatus for time aligning a first signal and a second signal, said first

2   signal being a Non-Return-to-Zero data test signal and said second signal being a Return-to-Zero

3   pulse signal, said apparatus comprising:

4   a modulator for modulating said second signal with said first signal to provide a

5   third signal;

6   a filter for filtering said third signal to provide a filtered signal, said filter filters

7   said third signal while sweeping said second signal through a time delay range; and

8   a detector for detecting a fundamental frequency of said third signal, said detector

9   detecting when said filtered signal is at a minimum level at a first delay value, said detector

10   further detecting when said filtered signal is next at said minimum level at a second delay value,

11   said detector further providing a delay value for said second signal being at a time delay value

12   between said first time delay value and said second time delay value.